

SEPTEMBER 1978

The Spark Gap

BOOK IV VOL IX

Official Journal of the Wellesley Amateur Radio Society

It seems good to be back at the mill for another season of getting out this newsletter. We trust you have all had an enjoyable summer and are now ready to participate in another season of fun-filled activities.

We did have a couple of old members up this way during their vacation periods as Dick Jansson, WD4FAB, and his son Ed, WD4DTC, came on for the wedding of Dick's daughter. Allan Kuong, WA1SCS, was home from the U.S. Naval Academy and will go back as a member of the senior class. It was nice hearing them on 2 meters.

Over the summer we went out to Long Island for our field day while another group from the club went down to Martha's Vineyard to do their thing. They had access to a 200' tower which made a big difference to their 2 meter contesting. They scored pretty well but the exact points are not known to the editor at this time. The club scored 2200 points for their part. Conditions were good and many clubs have reported better scores than the year before, and....the weather was ideal.

Novice and General classes are being set up for commencement sometime in October. Details in the next issue. Anyone wishing to assist in these classes are most cordially welcomed. Get in touch with Bill Downing, WA1PQY, so he can fit you into the schedule.

On July 31st we had our second annual picnic with the Middlesex Radio Club at the AUBURNDALE playground. This was a good day weatherwise, and for our club, great,

our softball team beat Middlesex by a score of 18-9 to even the series. We had a nice turnout from both clubs and we hope you will make it out there next year too.



Following in Dad's footsteps is Lenny Kirschen, 18 months old. His dad is WA1ZRH; David.

HAMS COME FORTH AGAIN....from UPI.

Ernest Bracy says he has handled many amateur emergency calls so it was almost routine for him when he helped save the daughter of a San Francisco man vacationing in the South Pacific.

Bracy on June 27th, said he answered an SOS from Michael Metzger, a ham who was vacationing on the island of Moorea, an island near Tahiti. She had been stung by a bee and developed an allergic reaction. Her neck had swollen quite a bit and was having difficulty breathing when the call was picked up on 20 meters. A shot of adrenalin got her breathing again, but where to go from there was uncertain to the girls father. Bracy called the Augusta Hospital and patched a doctor in on the line so he could talk him through the crisis telling which medicines in the emergency kit he could use and how. As a result of this action, the girl survived with a close call. The girls dad was working as FOOPHM along with his brother

MEETINGS THIS MONTH:

Thursday, Sept. 21 at 7:30 PM

Intermediate Bldg., Wellesley Hills, Mass.

Pete and were DX'ing from the island. We sure are glad that all turned out well and that some of our guys were able to help as well as they did.



"New Tickets"

ACID????? Well almost, it is the new call of Matt Vartanian, ex-WA1WDF. His new call is AC1D. Matt upgraded to Extra some months ago and only recently got this new call.

Through the summer we do have other guys who upgraded. To Extra, Dick Magnanti, WB1BUQ, to Advanced Ed Pavone, WB1ECR, Bill Hanlon, N1ADY, ex-WB1FCU, Ted Gruber, WB1ECE to General tickets are Bill Opalka, WB1ECB, Frank Callahan, WB1GKU, Chad Johnson, N1ABZ, ex-WA1YHT, Farrell Woods, WB1ELQ, Glenn Brodie, N1ABN, ex-WB1BVN, George Young, WA1YAU. Dave Smith, K1BSO, got his Extra. Charlie Reynolds got his Novice ticket and sports the call, KA1AXW. N1ABS is Pete Spotts, our Vice-President, who was ex-WB1BUP.

Gosh, the FCC says that these new calls are designed to 'lighten their work load' but from the confusion I am finding, I am wondering what they mean.

For those of you having upgraded but have not received recognition of it, please drop a line to Jim Hatherley, WA1TBY so we can update you on the roster.

NEW CLUB MEMBERS

It is always a pleasure to welcome in new members to the club and we would like to introduce to you John O'Brien, KA1BDE, Jid Kamitian, W1OJN, Larry Del Signore, (no call yet), Howard Chick, WB1ECG and Steve Belasco, WA3CPK.

We meet on the first and third Thursday of each month in the basement of the club at 7:30 P.M. so we will get a chance for a few eyeballs I am sure. Welcome into the fold Gentlemen.

* * * * *

OFFICIAL BULLETIN

Nr 709 dated May 25, 1978 bt

A ten meter beacon is operating in North Hollywood, California, under FCC special temporary authorization. Until September 30, W6IRT will be operating on 28.888 MHz using low power cw emission. Monthly rece-

ARRL OFFICIAL BULLETINS,...CONT'D

ption reports are solicited. This beacon supplements several beacons now operating around the world just above 28,200 MHz. A complete list appears in How's DX, June QST ar

Nr 713 dated June 22, 1978 BT FCC recently reminded United States Amateurs that third party traffic is permitted only with amateurs in the following countries, Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Ghana, Guatemala, Guyana, Haiti, Honduras, Israel, Jamaica, Jordan, Liberia, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay and Venezuela. In addition U.S. Amateurs can handle traffic for U.S. amateurs operating 4U1TU, stations in Greenland bearing the XP prefix, United States stations operating portable from Barbados identified as portable 8P6, and only with WD5AJE/SU in the Sinai. Note that third party traffic is no longer permitted with HZ1AB in Saudi Arabia AR

NR 716 dated July 13, 1978 BT ARRL Museum of Amateur Radio has been returned to the Headquarters display area. Potential visitors to ARRL Headquarters are advised that the museum hours are from 8 a.m. to 5 p.m. Monday through Friday and that hourly tours of the headquarters complex are conducted at 9, 10 and 11 a.m. as well as 1, 2, 3 and 4 p.m. weekdays only. Visitors may operate W1AW between 1 p.m. and 4 p.m. Monday thru Friday providing they have the original of their amateur radio license in their possession. ARRL will be closed to visitors on August 31 and September 4, 1978 AR

NR 717 dated July 20, 1978 BT Effective July 5, 1978 there is a reciprocal operating agreement in effect between Greece and the United States. U.S. amateurs anticipating travelling to Greece in the immediate future should write International Services, ARRL, Newington Ct. 06111 for further info. Details will appear in September 1978 QST,

NR 720 dated August 10, 1978 BT The 1978-1979 Net Directory, with full information on over 600 traffic and emergency nets, is now ready for distribution. This attractive newly revised pamphlet lists nets by name, area and frequency. In addition, it

9/18

The Spark Gap

Official Journal of the Wellesley Amateur Radio Society



EDITOR-IN-CHIEF, JAMES W. HATHERLEY

THE "SPARK GAP" IS A MONTHLY PUBLICATION OF THE WELLESLEY AMATEUR RADIO SOCIETY. ITS SOLE PURPOSE IS TO KEEP ITS MEMBERS ABREAST OF CURRENT HAPPENINGS, F.C.C. RULES & REGULATIONS CHANGES AND TO LIST EQUIPMENT OFFERED FOR SALE OR TRADE BY MEMBERS. MEMBERS ARE ENCOURAGED TO CONTRIBUTE TO THE SPARK GAP AND MAY SEND THEIR ARTICLES (TYPEWRITTEN IF POSSIBLE) TO THE EDITOR-IN-CHIEF OR TO THE CLUB ADDRESS.

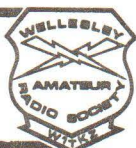
THE WELLESLEY AMATEUR RADIO SOCIETY IS A NON-PROFIT ORGANIZATION DEDICATED TO THE PROMOTION OF AMATEUR RADIO THROUGH INSTRUCTION, FELLOWSHIP, DEMONSTRATION AND ENCOURAGED PARTICIPATION. ANNUAL MEMBERSHIP IN THE SOCIETY-\$5.00. CLUB YEAR RUNS FROM SEPTEMBER 1 - JUNE 30. AMATEUR NOVICE AND GENERAL CLASSES ARE CONDUCTED REGULARLY AT NO COST. TO ENROLL IN A CLASS OR GAIN INFORMATION ABOUT THE SOCIETY IN GENERAL, WRITE THE WELLESLEY AMATEUR RADIO SOCIETY, 324 WASHINGTON STREET WELLESLEY HILLS, MASS 02181



ARRL OFFICIAL BULLETINS.....CONT'D

tells how to check into a net, itemizes special Novice Nets, lists ARRL numbered Radiograms, QN signals, and much more. For your free copy of this popular arrl membership service, send an addressed envelope, at least nine by twelve inches in size, with forty one cents U.S. postage to ARRL Net Directory, 225 Main St., Newington CT, 06111. AR

QSY PLEASE,
deWITKZ
QRP



PETE'S PEANUT WHISTLE...by Pete Spotts N1ABS

Award seekers, lend an eye (when was the last time you read with your ears?). Herewith are two award possibilities to get at least some of you working QRP at least some of the time and give you some wall paper to boot!

But first, a bit of background, Bob Novack, WALLJB, and I were doing a bit of ragchewing on two meters not long ago. We were talking about operating QRP. Bob has

PETE'S PEANUT WHISTLE.....CONT'D

tried it, and enjoys it. And I don't think anyone doubts my position on it. Bob was speculating that one way to get more people interested in QRP work is to offer some kind of an award. "Someone should come up with a miles-per-watt award, or something", he said.

Bob's inspiration, along with the summer heat to add the perspiration, has resulted in two award ideas I'd like to kick around with you.

The first is precisely what Bob suggested--a miles-per-watt award. This award would be open to anyone running any amount of power. While this may seem to defeat the award's purpose, it really doesn't. Why? Because the object is to get the best MPW rating, and like cars, the only way to get those better ratings is to go farther on less power. The award initially would be issued for a 500 MPW QSO. Thereafter, endorsements would be available for QSO's from 1000 MPW to 10,000 MPW increments.

The second award is for true QRP'ers only. This is a Worked-All-Call-Zones, (WACZ), award for contacts with all U.S. call zones, using the number -- such as WB6... or AA0... as a guide. In this instance, endorsements would be available for working U.S. possessions, such as Guam or Puerto Rico. Although Hawaii and Alaska are states, endorsements would be available for them as well.

In both awards, the power rating used would be output power. In the case of solid state equipment, this is no problem because power ratings for such equipment usually is given as power output. For tube rigs or solid state rigs with input to the final given as the power rating, that figure would be multiplied by .60 to give a ball park power output figure.

Because the WACZ award is limited to QRP'ers only, QRP must be defined. For tube rigs, anything less than 100 watts DC input will qualify as QRP, while anything less than eight to nine watts DC input will qualify as QRPP. For solid state rigs, 60 watts output will qualify as QRP, with anything less than five watts output qualifying as QRPP. In these figures, the aforementioned .60 factor already has been used in computing power for tube rigs.

And, in the case of the WACZ award, an endorsement would be available for operating QRPP, rather than QRP.

PETE'S PEANUT WHISTLE....CONT'D

With the way the bands have behaved in the last few months, both of these awards should be fun to try for. Some examples from my own log over the last two months include California, Arizona, Utah and Wyoming--all using no more than about 1.3 watts output. And the California QSO will be one of my most memorable. Not only did Vera, WB6BBK, give me a 589 signal report, but she sent a QSL card that almost was banned in Boston--my wife was doing the banning.

What I need now is some comment from you club members. If there is enough support for the awards, I'll try to get them going. And once they've been established, there may be no reason why they can't be expanded into a nationwide award, granted in the name of the Wellesley Amateur Radio Society. Who knows? Maybe we can become the QRP Capital of the EAST! 73.

de Pete Spotts, NLABS

* * * * *

Auctions / Flea Markets

Sept. 10 South Dartmouth, Ma., SEMRA family hamfest, 9 AM to 5 PM. Stackhouse St. fairgrounds.

Sept. 16 New London, CT. The Connecticut Valley FM Association Hamfest and Flea Market at King Ridge Ski Area from 10 AM to 5 PM. Free inside/outside flea market. \$1.50 in advance or \$2.00 at the gate. Food available.

If you have any news of auctions or hamfests, please contact Ray Shoop, N1CW so he can incorporate it in his listings.

* * * * *

Harmonics About Town



SCM.....WHAT'S THAT?

Glad you asked. The SCM is the Section Communications Manager. Our section, in the ARRL scheme of things, is Eastern Mass roughly the eastern third of the state. The League members in the section are asked to elect an SCM once every two years. That election is coming up in October. This article is going to tell you about someone who wants to serve as your SCM.

"O.K.", you say to yourself. "But what does an SCM do and why should I bother my-

SCM.....WHAT'S THAT? CONT'D

self with it? What difference does it make to me who's SCM?"

The SCM is the leading official of all League sponsored operating activities within the section. The obvious things are the operation of the National Traffic System and the Amateur Radio Emergency Service, the two sub-parts of the Amateur Radio Public Service Corps. These two activities are managed by the SCM appointed Section Traffic Manager and Section Emergency Coordinator. And while these two efforts certainly constitute a key part of the SCM's responsibilities (they are the best examples of how amateur radio meets the basic reasons for why the Amateur Radio Service exists), there's a lot more to it.

The SCM is tasked to promote and maintain a high level of interest and enthusiasm within the amateur community. Now how he does this isn't clearly defined. It includes things like running licensing classes, promoting public relations with shopping mall displays, being active on the air on all bands and engaging in a wide variety of on the air activities, training amateurs in traffic and emergency communications, being accessible to all amateurs throughout the section, and on and on.

Rick BEEBE, K1PAD, has done it all and he's doing it all every day. There's no doubt about it. Rick will make one heck of a fine SCM. He's got a campaign platform made up of a whole series of very positive planks. Things that are done routinely in many areas of the country that are somehow lacking in East Mass. Things like an effective, section-wide, coordinated emergency communications plan. A federation of East Mass. clubs with bulk-rate mailing privileges, crossfeed of ideas between clubs, speakers bureau, and a whole host of other things that such a federation can do for amateur radio. Recognition for public service work (sort of a BPL or PSHR for the guys who do the daily task of letting the public know what amateur radio is all about). On the air news of what's happening in amateur radio both within and outside the section, traffic training, emergency communications coordination, etc., etc.

And the bottom line is being available. Every amateur should have a voice in what amateur radio is doing in the East Mass. section. What the League is doing for

SCM.....WHAT'S THAT?...CONT'D

amateur radio. But in order to have that voice, you must have someone in a position of authority and responsibility to talk too. And he must be available. On the air. At club meetings, wherever.

Rick can do these things for you and your club. He wants to be your SCM. Come on out and meet KIPAD at the September meeting. Hear what he has to say to YOU, then YOU make up YOUR mind and be prepared to cast your ballot in October.

Respectively submitted, Bruce A. Eggers, WA9NEW/1, 14 Judith Rd., Chelmsford, Ma. 01824, Tel: 256-7861.

“timeout!”

by Mike Adlerstein, K1FB

Now that everyone feels comfortable on 2 meters FM, it's time for the more adventurous among you to take a hard look at 3 CM or 10 gigahertz. Put another way, 10,000 MHz. At such high frequencies, QRM is hardly a problem even though the typical signal occupies about 75 KHz bandwidth as opposed to 5 KHz on 2 meter FM.

Transmitters and receivers on 10 GHz are a little different from those to which we are accustomed. Until recently, they were quite difficult to obtain. Now Microwave Associates of Burlington, Mass. offers a set of two complete transceivers for about \$200.00. This price includes the horn antenna for each unit. The transmitter has an output of about 20 mW and the antenna has a forward gain of 17 db giving an effective radiated power of about 1 watt.

The basic structure of the unit is shown in the figure. Aside from the 10 vdc power supply, one need only attach a microphone and a 30 MHz FM receiver to each transceiver for a complete set up. A real poor man's set up can be obtained by offsetting the frequency of the transceiver unit by 100 MHz and using an ordinary FM broadcast radio as an RF amplifier-detector.

Unfortunately, space does not permit a full description of the technical aspects of 10 GHz operation. They are, however, reasonably simple in practice. Suffice it to say that for those who would like full duplex (transmit and receive simultaneously) point to point communication and for those

TIMEOUT.....CONT'D

who enjoy mountain topping with a map and a compass, the 3 cm band is the place to be.

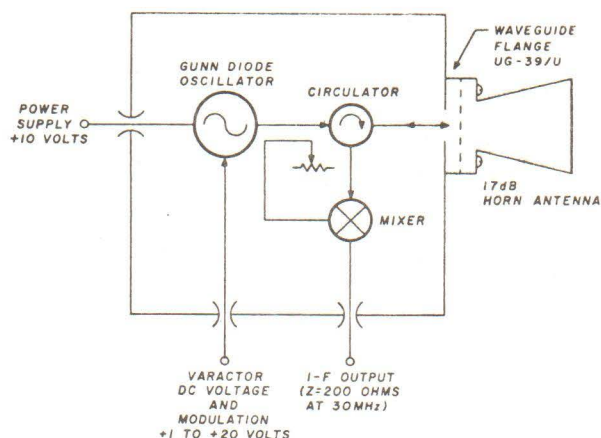


fig. 1. Basic Gunnplexer system showing the varactor-tuned Gunn-diode oscillator, ferrite circulator, and Schottky mixer diode. A portion of the rf power from the oscillator is coupled to the mixer through the circulator.

Further information may be obtained from G. R. Whitehouse & Co., 10 Newbury Dr. Amherst, N.H. 03031, and from an excellent article in Ham Radio Magazine August 1978, Page 10. 73 and see you next month.

de Mike Adlerstein, K1FB

* * * * *

How's DX

by Bob Rudko, W1HSS

Summer is coming to an end and the good Fall conditions should be upon us soon. It appears that the peak of the present sunspot cycle (Cycle 21), may end up being one of the best ever. If things keep going as they have been, it looks like at the peak of the cycle, the record sunspot numbers reached in the late fifties, may be exceeded.

Aside from good conditions, many of the very rare DX stations have been on the air recently or will be coming on soon. The two most well known of the ones which were on are Clipperton Island and Iraq. Both of which had not been on the air in many years. Speaking of Clipperton, if you worked them, you should have gotten your QSL by now. Other rare ones which will be on include Bouvet, the Saudi-Iraq neutral zone Mellish reef and South Sandwich.

HOW'S DX.....CONT'D

As the good Fall conditions arrive, keep your eye on 10 meters. This band will probably open up and with the low QRM level on 10, it should be easy to work plenty of DX stations.

A weekend to watch for is October 28-29, as this is the CQ weekend phone contest and many stations will be on the air competing. Good DX'ing and see you next month.

de Bob Rudko, W1HSS

* * * * *

FROM THE MAILBAG



I am a ham of 7 months experience. I was enrolled at the W1TKZ novice class by my wife who thought I needed a hobby. Dave Smith, K1BSO, looked after the class and did a great job. I remember hearing the dits and dahs everywhere when I first started. Even the plumbing seemed to know the code.

I was W1GDF by the New Year, but it took me 2 weeks to get my first contact. I had bought an old EICO 753 transceiver at an auction and erected an inverted vee (bent around the attic corners) to get out on. W1FZV and W1GEE helped me to align the receiver and all seemed to be working well except I failed to understand the correct use of the offset tune. When I started to answer on the same frequency I started to get contacts.

That first contact was with W3IVX. I had a tape recording of this which I inflicted on everyone who came near me for the next few days. After muddling through a few more contacts I realized I had made another mistake. The second side of the ARRL code-practice tape "Tune in the world" has three practice qso's. If I had known the standard format it would have made the first few contacts easier to understand. For the same reason, I would have liked to have studied for the comprehension type code test during the novice class, instead of the one minute of solid copy.

My antenna is 20 ft. away from the TV master receiving antenna for twelve houses so it's not surprising that I caused TVI. A combination of a good ground and a low-pass filter on the rig, a hi-pass on the TV antenna, a transmatch and most of all, a visit from Dave Smith, K1BSO, and Bill

FROM THE MAILBAG.....CONT'D

Downing, W1PQY, fixed me up. After 4 mths I bought a Tempo-I at the WARS auction which works much better.

When the W1TKZ general class started, I was disappointed to find that there would be no code practice. However, John Woods, W1CJS, of the Central Mass. ARC, took on the job. He got my code speed up at a weekly practice session, and then I took my first trip to the FCC in Boston. I passed the code test -- it really is easier than you think, the written test however, was harder than I had anticipated it would be. I passed the written test only at a second attempt, six weeks later.

Thanks to the many hams who helped me to get my license. Seven months ago I thought that a general ticket would take years to get. It doesn't -- not when there are so many experienced hams around who are so willing to help the novice along.

Respectfully submitted Pete Bradley, N1ADX, 2707 Windsor Ridge Dr., Westboro, Ma.

EDITORS NOTE: In today's times of changing operating habits, we seem to get lost in the many branches of amateur radio and forget to spend a little time being an ELMER to some newcomer. Have you done your bit lately to help someone improve his techniques? Our thanks to those of you who have given so unselfishly of your time, that's what makes our hobby so unique.

* * * * *

ELECTRONIC EXCHANGE

FOR SALE: A half assembled Heath HW-101, fully built Heath HP-23C AC power supply, and Heath HDP desk mike. Selling below cost at \$400.00. Call Walter Lenk, K1YTY at 237-9289.

FOR SALE: Eico FET-TVM. In excellent condition, with manuals and test probes. \$40.00 Call Pete Spotts, N1ABS at 262-1595.

WANTED: Heathkit SB-620 Spectrum Analyzer, 455 KHz IF. A RBL or RBA Navy surplus long wave receiver. A Hammarlund HQ-150 Receiver. W.T. Farmerie, Grafton, Ma. Tel: 485-9100 ext 2527 days or 839 5143 eves.

FOR SALE: TA-33 SR Mosely tri-band beam w/rotor HAM-M & controls. \$90.00. call

George LaBarre, K1CVH, or Mac, WAIIGL at 877-2717.

Dues Dues Dues...

Yep, it's that time again when I have to take out my fiddle n bow and sing this age old song again. September 1st marks the beginning of a new club year and also is the date when your dues is due. The amount, in spite of the increase in postal rates, is still \$5.00.

We had hoped to mail out separate forms for membership renewal but due to the unnecessary costs of mailing, we thought you would come through on your own when you read this notice in the SPARK GAP.

Checks can be made out to the WELLESLEY AMATEUR RADIO SOCIETY and mailed to me, Jim Hatherley, WAIIBY, 46 Hobson St., Brighton, Ma. 02135.

For those newer members who joined from May 1st on, your dues is paid for the year and will expire on August 31, 1979.

Family membership is also available for an additional \$2.00 per family member, but remains at \$5.00 for the head of the family.

* * * * *

Executive Minutes

Due to the summer doldrums, the Executive committee has also adjourned for the same time but will reconvene with a meeting at the club on September 9, 1978 at 7:30PM. All executive meetings are open to members of the club who wish to come and see what is going on.

At present Dick Magnanti, WB1BUQ has a Committee going to discuss changing the club's Constitution and by-laws. This is mostly changes in the wording but it will be presented to the membership after more meetings and work on it.

It Seems to Me...

And, there it is, another edition of the Gap, our first since the summer layoff and though it was fun doing it, it was also a little hard getting back into the saddle to make the deadline. As it was I am a little behind my deadline but can't say much about that except that I will try not to have it happen again.

In the months ahead, we would like to hear from you, for no paper is ever a success unless it has something to write about and this must come from the membership. We also have columns for any of the YL or XYL folk who will take time off to drop us a note on their views. (Remember WEARY?)

Unofficially I have heard that we will be starting Novice classes on October 2, and General classes on October 3 but will have more information in the next issue.

The young new ham who wrote the letter to the GAP, tells me the importance of going ahead with having our club station send out code practice during the week so these new aspirants can have the opportunity of getting their tickets upgraded.

I would also like to see the club net start again, probably on the same time as the code practice took place.

Perhaps you would like to see something happen too. If so, just drop a line to me so it can be brought up for consideration. You could have some good ideas that we haven't thought of yet and your help would be great.

And so, with that, I will look forward to seeing you all at the next regular meeting on September 21st at the club.

73,

Jim Hatherley, WAIIBY
Editor, Spark Gap